

CLAIMS

1. A repeat circuit for use with an audio receive and reproduce device including:
  - a RAM connected to normally receive and store audio inputs applied to said device;
  - a manually operable input component; and
  - 5 a control operable in response to a selected input from said component for inhibiting application of incoming audio inputs to said device and for instead applying audio inputs stored in said RAM as audio inputs to said device, the audio reproduced by said device being selectively delayed from incoming audio inputs by a time dependent on where in said RAM said control begins the applying of audio inputs to said device.
10. A circuit as claimed in claim 1, wherein the location in said RAM at which the applying of audio inputs begins, and thus the delay between incoming audio inputs and reproductions, is controllable in response to selective operation of said component.
15. A circuit as claimed in claim 2, wherein said delay is a function of at least one of the number of times said component is operated and the time said component is operated.
20. A circuit as claimed in claim 2, wherein when said device is receiving inputs from said RAM, the circuit is in replay mode, and including an output element providing a selected indication that said circuit is in said replay mode, said output element also providing an indication of said delay.
25. A circuit as claimed in claim 4, wherein said output element is a selected display, and wherein said control causes said display to blink at a rate which is a function of said delay.
6. A circuit as claimed in claim 1, wherein when said device is receiving inputs from said RAM, the circuit is in replay mode, and including a multicolor LED, the LED displaying one color for replay mode, and a second different color for normal mode with incoming audio inputs applied to the device.
7. A circuit as claimed in claim 6, wherein said RAM is a wrap-around memory, the oldest audio input therein being written over when a new audio input is received and said RAM is full, and wherein said control inhibits writing over of audio inputs in said RAM in response to a selected

input from said input component, the circuit being in storage mode when this occurs, and wherein said LED displays a third color when said circuit is in storage mode.

8. A circuit as claimed in claim 1, wherein said RAM is a wrap-around memory, the oldest audio input therein being written over when a new audio input is received and said RAM is full, and  
5 wherein said control inhibits writing over of audio inputs in said RAM in response to a selected input from said input component, the circuit being in storage mode when this occurs, and wherein said control causes incoming audio inputs to be applied to said device when the circuit is in storage mode.

9. A circuit as claimed in claim 8, wherein said control is operative when the circuit is in  
10 storage mode to cause at least selected portions of audio inputs stored in said RAM to be reproduced on said device in response to a selected input from said input component.

10. A circuit as claimed in claim 9, wherein said selected input is said input component being manually operated for a selected time interval.

11. A circuit as claimed in claim 1, wherein said device is a radio, and wherein said circuit is returned from replay mode to a normal mode with incoming audio inputs applied to said device  
15 when there is a station change on said radio.

12. A circuit as claimed in claim 1, wherein said control processes audio inputs applied to said RAM.

13. A circuit as claimed in claim 1, wherein said component is operable to indicate a desired rate  
20 at which audio inputs are to be reproduced to said device; and, wherein said control is operable in response to a rate indication from said component for controlling the rate at which said RAM is read out to apply audio inputs to said device.

14. A circuit as claimed in claim 13, wherein said component is operable in at least two different ways, said component being operated in a selected way to indicate a desired rate.

25 15. A circuit as claimed in claim 1, wherein said control is operative in response to a selected input to set said circuit into an elimination mode, said control being operative when in elimination

mode to store in said RAM a selected duration of audio inputs ahead of inputs received by said RAM, and is responsive, when in elimination mode, to a selected input from said component for skipping an audio duration in said RAM which is less than said selected duration, whereby audio during said audio duration is not reproduced at said device.

5 16. A circuit as claimed in claim 15, wherein said audio duration is variable in response to variations in the selected input from said component.

10 17. A circuit as claimed in claim 15, wherein said control is operative when in elimination mode to store said selected duration in said RAM before applying audio inputs from said RAM to said device.

15 18. A circuit as claimed in claim 15, wherein said control is operative, when in elimination mode to apply audio inputs to said device from said RAM, said RAM being read out to apply inputs to said device at a slower rate than audio inputs are received to be stored in said RAM at any time said RAM is not storing at least said selected duration of audio inputs.

20 19. A circuit as claimed in claim 1, wherein said audio inputs are digital inputs, each segment of digital input being transmitted during at least two time-spaced intervals, said time-spaced transmissions being stored in said RAM, and wherein said control read out all stored transmissions for a given audio input and processes said multiple transmissions to obtain an enhanced audio input for said device.

25 20. A circuit as claimed in claim 19, wherein said control compares said multiple transmissions and select the best transmission for each audio input segment as the enhanced audio input applied to said device for the segment.

21. A method for providing enhanced audio outputs including:  
25       digitally transmitting each segment of an audio broadcast at least two times, which broadcast transmissions are at time-spaced intervals;  
       storing said time-spaced transmissions in at least one RAM;  
       reading out all stored transmissions for each broadcast segment;

processing the multiple transmissions to obtain an enhanced audio for the segment; and applying the enhanced audio to be reproduced.

22. A method as claimed in claim 21, wherein said processing step includes comparing said multiple transmissions for each segment, and selecting the best transmission for the segment as the  
5 enhanced audio input for the segment.

23. A method for repeating audio inputs which are normally applied to an audio receive and reproduce device including:

a) digitally storing said audio inputs in a RAM for a selected interval starting from the currently received input; and

b) inhibiting reproduction of currently received audio inputs by said device and causing the reproduction by said device from inputs received from said RAM in response to a manually controlled user input, the audio reproduced by said device being selectively delayed from incoming audio inputs by a time dependent on where in said RAM said control begins the applying of audio inputs to said device.

15. 24. A method for providing enhanced broadcast outputs including:

digitally transmitting each segment of a broadcast at least two times, which broadcast transmissions are at time-spaced intervals;

storing said time-spaced transmissions in at least one RAM;

reading out all stored transmissions for each broadcast segment;

20 processing the multiple transmissions to obtain an enhanced output for the segment; and applying the enhanced output for utilization.

25. A method as claimed in claim 24, wherein said processing step includes comparing said multiple transmissions for each segment, and selecting the best transmission for the segment as the enhanced output for the segment.

26. A repeat circuit for use with an audio receive and reproduce device including:

A RAM connected to normally receive and store audio inputs applied to said device, said RAM being a wrap-around memory, the oldest audio input therein being written over when a new audio input is received and said RAM is full;

5 a manually operable input component; and

a control operable in response to a selected input from said component for inhibiting application of incoming audio inputs to said device and for instead applying audio inputs stored in said RAM as audio inputs to said device, said control inhibiting writing over of audio inputs in said RAM in response to a selected input from said input component, the circuit being in storage mode when this occurs, and wherein said control causes incoming audio inputs to be applied to said device when the circuit is in storage mode.

10 27. A circuit as claimed in claim 26, wherein said control is operative when the circuit is in storage mode to cause at least selected portions of audio inputs stored in said RAM to be reproduced on said device in response to a selected input from said input component.

15 28. A repeat circuit for use with an audio receive and reproduce device including:

a RAM connected to normally receive and store audio inputs applied to said device;

a manually operable input component, said component being operable to indicate a desired rate at which audio inputs are to be reproduced to said device; and

20 a control operable in response to a selected input from said component for inhibiting

application of incoming audio inputs to said device and for instead applying audio inputs stored in said RAM as audio inputs to said device, said control being operable in response to a rate indication from said component for controlling the rate at which said RAM is read out to apply audio inputs to said device.